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ABSTRACT

The relationships between feedback, its source, and the increases or decreases of the behavior associated with it were investigated to apply predictions of the credibility gap regarding the effects of feedback on the acquisition of an individual skill. Subjects (N=45) were randomly assigned to one of five treatment conditions and provided different types of feedback based on their actual task performances on two different trials. Dependent variables selected to measure the effect of the experiment included state-anxiety, self-confidence, credibility and desirability of feedback, and qualitative ratings for each subject's responses. Results indicated that positive feedback is almost always rated as more credible by recipients, and that subjects, while more receptive to positive feedback and tending to ward off negative feedback, acquire the performance task regardless of the feedback received. (Author/HLM)

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THE EFFECTS OF DESCRIPTIVE, VALENCED, ANONYMOUS FEEDBACK ON COUNSELOR LEADS

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NOTE

This article is based on the author's doctoral dissertation submitted to Indiana University under the direction of Dr. Ronald Baker and Dr. Nicholas Fattu.

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ABSTRACT

An investigation to determine the effects of five different types of feedback i.e., positive behavioral, negative behavioral, positive emotional, negative emotional, and no feedback on five dependent measures. The five dependent measures used for this research were: situational anxiety, self-confidence, desirability of the feedback, perceived credibility of the feedback and task performance (qualitative ratings of 24 counselor tacting responses leads).

The 45 subjects who participated in this research were all resident assistants at a small northeastern university in New York. Subjects were randomly assigned to one of five treatment conditions. Manipulation of the independent variable of feedback was accomplished by the type of feedback each subject received during the treatment phase of the research.

A split-plot factorial design with repeated measures on the same subject (SPF 5.2) was used because this research required subjects to be exposed only to one level of one treatment, but all levels of another treatment. Two multivariate analysis of variance, two multiple regressions, and an analysis of covariance were used to analyze the data.

Major findings of this research suggests that all subjects acquired the performance task regardless of the feedback they received. Additionally subjects who received negative behavioral feedback and negative emotional feedback rated the feedback as significantly less desirable and significantly less accurate than subjects who received positive behavioral feedback and positive emotional feedback.

This research helps to support predictions from: Roger's self-theory, which suggests that subjects are more receptive to positive-enhancement than feedback which threatens self-image; Festinger's dissonance theory, which suggests that individuals are predisposed to ward off information that would disconfirm a positive conception of self, and Jacobs "credibility gap" i.e., positive feedback is almost always rated by its recipients as more credible than negative feedback.

Hypothesis generated from an operant learning paradigm i.e., subjects should learn more quickly when given positive feedback were not supported.

Because the field of counseling psychology has recently adopted a more outcome-oriented scientific stance (e.g., Bandura, 1969; Bergin & Garfield, 1971; Franks & Wilson, 1973; Lazarus, 1972; Ullmann & Krasner, 1969), counselors and other helpers must be trained to use scientific techniques to maximize the effects it has on clients. The principles of classical, operant, and social learning are well established in the laboratory, but have not found wide acceptance in teaching basic counseling skills for various reasons. For example, researchers obtain mixed results about whether we learn more quickly when punished for incorrect responses than when reinforced for correct responses. According to an operant learning paradigm, individuals should learn more quickly when rewarded for a correct response than when punished for an incorrect response. A basic shortcoming of this type of research is that the definition of reward and punishment have not been adequately field tested, e.g., to determine if the loss of candy is truly a punishing experience to someone who may not be in a deprived state (see Skinner, 1953). Yet, several researchers (Penny, 1967; 1961; Ratliff & Tindall, 1970; Schlicter & Ratliff, 1971) still suggest that learning occurs more quickly when we punish for incorrect responses. Donahue and Ratliff (1976) found subjects did as well when punished for incorrect responses as when rewarded for correct responses during the acquisition phase of learning a task.

In spite of these contradictions, an essential issue in the understanding of learning is the concepts of knowledge of results and feedback (Benne, et al, 1964). That is, in learning about the effect

of one's behavior on other people, the learner needs to have some report of the effects of his responses on others (Skinner, 1938). Thus, as Skinner has argued, behavior is largely determined by its consequences (feedback or lack of feedback) which either will strengthen or weaken the response. However, theoretical and practical questions remain to be answered regarding the use of feedback, the manner of delivering feedback, and the effects of feedback on a task over many trials.

Jacobs, et al (1973a; 1973b; 1974) and Jacobs (1974) have sought answers to the contention that feedback is one of the most important processes which occurs in group interventions. Jacobs, in his pioneering work on the use of feedback in groups, found that feedback which describes the personal assets of group members is reacted to by the recipients with feelings of well-being and energy. Feedback which identifies recipients' deficiencies arouses anxiety and depression.

In an effort to refine further his research on feedback delivered in groups, Jacobs studied the effects of various combinations of positive and negative feedback and offered the following findings:

> Positive feedback tends to be perceived as more believable than negative feedback.
>
> Positive feedback is more desirable than negative feedback.

From these and other studies, Jacobs has stated that positive feedback is almost always rated by its recipients as more credible than negative feedback, a phenomenon he subsequently labeled, the "credibility gap".

If the "credibility gap" results generalize to longer and more complex attempts to change the behavior of individuals, it holds potential for other change programs in addition to group interventions. One might speculate that statements of a positive valence might assist individuals during the acquisition of a skill, on the other hand statements of a negative valence might hinder the acquisition of the skill.

The "credibility gap" phenomenon is consistent with the writings of Rogers (1951) who theorized that individuals are more receptive to positive self-enhancement than to information or feedback which threatens the self-image. Additionally, Festinger's (1957) dissonance theory tends to support the credibility gap as Festinger hypothesized that individuals are predisposed to ward off information that would disconfirm a positive conception of self.

Statement of the Problem

The purpose of the investigation is to apply predictions of the credibility gap regarding the effects of feedback on the acquisition of an individual skill. That is, what are the relationships between feedback, its source and the increases or decreases of the behavior associated with it. Specifically this study is designed to examine the effects of descriptive (behavioral or emotional), valenced (positive or negative), anonymous feedback on situational anxiety, self-confidence, desirability of the feedback, credibility of the feedback and task performance (the acquisition of a basic listening skill). Jacobs, et al, studied the credibility gap only in growth group experiences and never attempted to conceal totally the source of the feedback.

The experimental design is a split-plot factorial 5·2 with repeated measures on each subject (Kirk, 1968). The repeated measures are the same feedback on two different trials for each individual.

It is proposed that subjects will find positive feedback more credible, desirable, and having a greater impact on performance than other forms of feedback. Additionally, subjects receiving negative feedback will have lower scores on measures of self-confidence and higher scores on situational anxiety than subjects receiving positive feedback.

Procedure

Forty-five subjects, approximately one-half male and one-half female, were randomly assigned to one of five treatment conditions. The experimental design was a split-plot factorial (SPF 5·2) with repeated measures on each subject. The repeated measures were the same feedback on two different trials. Manipulation of the independent variable of feedback was accomplished by the type of feedback each subject received during the treatment phase of the research. That is, Group 1 (n=9) received Behavioral Feedback Positive (BF+); Group 2 (n=9) received Behavioral Feedback Negative (BF-); Group 3 (n=9) received Emotional Feedback Positive (EF+); Group 4 (n=9) received Emotional Feedback Negative (EF-) and Group 5 (n=9) did not receive feedback. Each subject received feedback based on his actual performance.

Five dependent variables were chosen to measure the effect of the experimental conditions. They were: 1) state-anxiety, as measured by the State-Trait Anxiety Inventory (Spielberger, Gorsuch, and Lushene, 1970); 2) self-confidence, as measured by the Adjective Checklist

(Gough & Heilbrun, 1965); 3) desirability of the feedback, which asks subjects to rate the feedback on a Likert-type Scale; 4) credibility of the feedback, which was measured on a Likert-type Scale and 5) a qualitative rating for each subject responses.

Hypotheses

H_1: Subjects receiving positive behavioral, negative behavioral, positive emotional and negative emotional feedback will demonstrate differential scores across the dependent measures.

H_o: There will be no differences on any of the five dependent measures of subjects across all feedback treatment conditions.

H_2: Subjects receiving positive behavioral feedback and positive emotional feedback will rate the feedback as more desirable than subjects receiving negative behavioral feedback and negative emotional feedback.

H_o: There will be no differences on ratings of desirability of feedback between subjects receiving positive behavioral feedback and positive emotional feedback than subjects receiving negative behavioral feedback and negative emotional feedback.

H_3: Subjects receiving positive behavioral feedback and positive emotional feedback will rate the feedback as more credible than subjects receiving negative behavioral feedback and negative behavioral feedback and negative emotional feedback.

H_o: There will be no differences on ratings of credibility of feedback between subjects receiving positive behavioral feedback and positive emotional feedback than subjects receiving negative behavioral feedback and negative emotional feedback.

H_4: Subjects receiving positive behavioral feedback and positive emotional feedback will have lower scores on the state-anxiety measure than subjects receiving negative behavioral feedback and negative emotional feedback.

H_o: There will be no differences on scores of the state-anxiety measure between subjects receiving positive behavioral feedback and positive emotional feedback than subjects receiving negative behavioral feedback and negative emotional feedback.

H_5: Subjects receiving positive behavioral feedback and positive emotional feedback will have higher scores on the Adjective Checklist (self-confidence) than subjects receiving negative behavioral feedback and negative emotional feedback.

H_o: There will be no differences on the scores of the Adjective Checklist between subjects receiving positive behavioral feedback and positive emotional feedback than subjects receiving negative behavioral feedback and negative emotional feedback.

H_6: Subjects receiving positive behavioral feedback will have higher qualitative ratings on the performance task than subjects receiving other forms of feedback.

H_o: There will be no differences on the scores of the qualitative ratings on the performance task between subjects receiving positive behavioral feedback than subjects receiving other forms of feedback.

H_7: Subjects receiving positive emotional feedback will have higher qualitative ratings on the performance task than subjects receiving either negative behavioral or negative

emotional feedback.

H_o: There will be no differences on the scores of the qualitative ratings on the performance task between subjects receiving positive emotional feedback than subjects receiving negative behavioral or negative emotional feedback.

Findings

The data analysis conformed to Kirk's (1968) recommendation for a split-plot factorial design 5·2 with repeated measures. Four statistical procedures were used: multivariate analysis of variance, univariate analysis of variance, analysis of covariance, and multiple regression.

Table 1

Analysis of Variance for Desirability of the Feedback

Source	SS	df	MS	F	Significance Level
Between subjects	102.61	35			
A(Type of Feedback)	73.39	3	24.46	26.79	$p < .05$
Subj.w. groups	29.22	32	.91		
Within subjects	10.00	36			
B(Treatment 1 & 2)	.50	1	.50	1.69	N.S.
AB	.05	3	.02	.06	N.S.
B x subj.w. groups	9.44	32	.29		
Total	112.61	71			

[Note, credibility of feedback and desirability of feedback represent correlated variables i.e., $r=.77$ ($p < .05$) during Treatment 1 and $r=.71$ ($p < .05$) during Treatment 2.]

A significant main effect ($p < .05$) was found for type of feedback (main effect A). No significant effects were found for treatment session 1 vs. treatment session 2 (Treatment 1 & 2), in other words, session 2 did not significantly increase or decrease the desirability of the feedback over session 1. The interaction between Type of Feedback and sessions 1 & 2 (AB interaction) also was not significant. Because a significant main effect was found for type of feedback, the data were combined across treatment sessions 1 & 2 and re-analyzed as a one-way analysis of variance (Table 2) in order to simplify the post hoc analysis procedures.

Table 2

One-Way Analysis of Variance for
Desirability of Feedback across Treatments 1 & 2

Source	SS	df	MS	F	Significance Level
Between subjects	36.69	3	12.23	26.79	$p < .05$
Within subjects	14.61	32	.46		
Total	51.30	35			

The results of this analysis indicated a significant main effect for treatment groups ($p < .05$). In order to test the differences between means, Scheffe's post hoc (Kirk, 1968) was used (Table 3). The results of this post hoc analysis were clear cut. Subjects who received positive feedback regardless of its type, i.e., either behavioral or emotional rated the feedback as significantly

more desirable than subjects who received behavioral negative and emotional negative feedback. Because of this finding null Hypothesis 2 was rejected.

Table 3

Comparison among the Desirability of Feedback Means Using Scheffe's Post Hoc Test of Differences among Means

Homogeneous Subsets (i.e., subsets of groups, no pair of which have means that differ by more than the shortest significance range for a subset of that size)		
*Subset 1		
Group	1	3
$\bar{X}$	1.78	1.50
*Subset 2		
Group	2	4
$\bar{X}$	3.78	3.50

*$p < .05$ (Subset 1 vs. Subset 2)

Table 4

Analysis of Variance for Credibility of the Feedback

Source	SS	df	MS	F	Significance Level
Between subjects	66.49	35			
A(Type of Feedback)	45.26	3	15.09	22.75	$p < .05$
Subj w. groups	21.22	32	.66		
Within subjects	7.50	36			
B(Treatment 1 & 2)	.68	1	.68	3.32	N.S.
AB	.26	3	.09	.43	N.S.
B x subj w. groups	6.55	32	.20		
Total	73.98	71			

Significance ($p < .05$) was obtained for type of feedback (A main effect). No significant differences were obtained for treatment sessions 1 & 2 (B main effect) which suggests that session 2 did not significantly alter the credibility of the feedback over session 1. The AB interaction was also not significant.

Because significance was obtained for type of feedback the data were combined across treatment sessions 1 & 2 and reanalyzed as a one-way analysis of variance (Table 5) in order to simplify the post hoc analysis procedures.

Table 5

One-Way Analysis of Variance for Credibility of Feedback

Source	SS	df	MS	F	Significance Level
Between subjects	22.63	3	7.54	22.75	$p < .05$
Within subjects	10.61	32	.33		
Total	33.24	35			

The one-way analysis of variance reached significance for treatment groups ($p < .05$). Scheffe's post hoc (Kirk, 1968) test of differences between means was used (See Table 6). Subjects who received behavioral positive and emotional positive feedback rated the feedback as significantly more credible than subjects receiving behavioral negative and emotional negative feedback. Null Hypothesis 3 was rejected.

Table 6

Comparison among the Credibility of Feedback by Feedback Conditions Means Using Scheffe's Post Hoc Test of Differences among Means

Homogeneous Subsets (i.e., subsets of groups, no pair of which have means that differ by more than the shortest significance range for a subset of that size)		
*Subset 1		
Group	1	3
$\bar{X}$	1.89	2.00
*Subset 2		
Group	2	4
$\bar{X}$	3.50	3.55

*$p < .05$ (Subset 1 vs. Subset 2)

The dependent variables of State-Anxiety and Task Performance were found to be unrelated i.e., r=.06 during Treatment 1 and r=.02 during Treatment 2. Therefore separate analysis of variance procedures were performed on the uncorrelated variables rather than a multivariate analysis of variance.

Table 7

Analysis of Variance for State Anxiety

Source	SS	df	MS	F	Significance Level
Between subjects	5979.22	44			
A(Type of Feedback)	407.44	4	101.86	.73	N.S.
Subj w. groups	5571.78	40	139.29		
Within subjects	2333.50	45			
B (Treatment 1 & 2)	104.54	1	104.54	2.07	N.S.
AB	214.07	4	53.52	1.06	N.S.
B x subj w. groups	2014.89	40	50.37		
Total	8312.72	89			

No significant main effects were found for either type of feedback (A main effect) or treatment sessions 1 & 2 (B main effect) nor was there a significant AB interaction. The results led to a failure to reject Null Hypothesis 4. The data did not support the experimenter's predictions that descriptive, valenced feedback would alter subjects' State-Anxiety. Additionally subjects' scores were not altered as a result of administering similar feedback over two sessions (treatments 1 & 2).

Table 8

Analysis of Variance for Self-Confidence

Source	SS	df	MS	F	Significance Level
Between subjects	257.11	4	64.28	1.02	N.S.
Within subjects	2512.67	40	62.82		
Total	2769.78	44			

Significance was not found, therefore no further analysis were performed on the data. Descriptive, valenced feedback did not significantly change subjects' self-confidence scores.

The qualitative rating obtained after Session 1 on the written responses was used as the covariate i.e., subject ratings on the performance task obtained during Session 2 were adjusted accordingly.

Table 9

Analysis of Variance for Task Performance

Source	SS	df	MS	F	Significance Level
Between subjects	6464.67	44			
A(Type of Feedback)	418.09	4	104.52	.69	N.S.
Subj w. groups	6046.58	40	151.16		
Within subjects	5567.50	45			
B(Treatment 1 & 2)	1292.01	1	1292.01	13.04	$p < .05$
AB	312.93	4	78.23	.79	N.S.
B x subj w. groups	3962.55	40	99.06		
Total	12032.17	89			

The results of the data indicate that there is no significant difference for either type of feedback (A main effect) or the AB interaction. There is, however, a significant ($p < .05$) main effect for treatment sessions 1 & 2. Because of the nonsignificant main effect for type of feedback and the nonsignificant AB interaction the data were combined across type of feedback and re-analyzed as a one-way analysis of variance (Table 10) in order to simplify the post hoc analysis procedures.

Table 10

One-Way Analysis of Variance for Task Performance

Source	SS	df	MS	F	Significance Level
Between subjects	1292.01	1	1292.01	10.59	$p < .05$
Within subjects	10740.16	88	122.05		
Total	12032.17	89			

The one-way analysis of variance reached significance for treatment groups ($p < .05$). Scheffe's post hoc (Kirk, 1968) test of differences between means was used; the results are reported in Table 11.

Table 11

Comparison among Task Performance Means Using Scheffe's Post Hoc Test of Differences among Means

Homogeneous Subsets (i.e., subsets of groups, no pair of which have means that differ by more than the shortest significance range for a subset of that size)	
*Subset 1	
Group	1
$\bar{X}$	3.79
*Subset 2	
Group	2
$\bar{X}$	3.79

*$p < .05$ (Subset 1 vs. Subset 2)

Subjects' qualitative ratings on the task were not affected by the descriptive, valenced feedback they received, however, there were significant differences between Treatment 1 and Treatment 2, which suggests that the increase in the ratings during Treatment 2 were significantly larger than Treatment 1. Null Hypotheses 6 and 7, therefore, were not rejected. All subjects performed the task with the same level of competency during Treatment 1 and Treatment 2; a finding this experimenter had not expected.

Hypothesis 1

Hypothesis 1 was to a large extent not supported by the data, i.e., significance was obtained on two of the five dependent measures. Because significance was not reached on all five dependent measures Null Hypothesis 1 was not rejected.

Pearson's Product Moment Coefficient of Correlations were obtained for all of the dependent variables. Table 12 illustrates the correlations obtained between anxiety, task performance, self-confidence, and the covariate for Treatment 1. Table 13 represents the correlations for all of the dependent measures only using the experimental groups. (Note, the no-feedback group did not contain scores for feedback desirability and credibility.)

Table 12

Pearson Correlations between Anxiety, Task Performance 1, Self-Confidence, and the Covariate for Treatment 1

	Anxiety	Task 1	Self-Conf.	Cov.
Anxiety				
Task 1	-.06			
Self-Conf.	-.43*	.03		
Covariate	-.15	.82*	-.08	

*$p < .05$

Table 13

Pearson Correlations between Anxiety, Desirability, Credibility, Task Performance 1, Self-Confidence, and the Covariate for Treatment 1 Only Using the Experimental Groups

	Anxiety	Des.	Cred.	Task 1	Self-Conf.	Cov.
Anxiety						
Des.	-.04					
Cred.	.35	.76*				
Task 1	.05	.08	.13			
Self-Conf.	-.44*	-.07	-.13	-.01		
Covariate	-.05	.13	.18	.84*	-.11	

*p < .05

Self-confidence and anxiety reached significance (r= -.43, p < .05, Table 23; r=-.44, p < .05, Table 13) which suggested that as anxiety increased, self-confidence decreased. Additionally, the covariate and Task 1 were highly correlated (r=.82, p < .05, Table 23; r=.84, p < .05, Table 13) as were feedback credibility and desirability (r=.76, p < .05). Other correlations did not reach significance.

The experimenter was interested in predicting Task Performance 1 from the other dependent variables; a multiple regression was used in which state-anxiety, self-concept, desirability of feedback and credibility of feedback became independent variables used to predict the criterion, dependent

variable of task performance. The intent was to determine the relative contribution of those independent variables to the criterion variable [R=.14 or less than two percent of the total variance]. This experimenter had hoped to predict much more of the total variance.

Tables 14 and 15 represent an identical procedure for Treatment 2. Again the covariate and Task 2 were highly related ($r=.70$, $p < .05$, Table 25; $r=.73$, $p < .05$, Table 15) as were feedback credibility and desirability ($r=.71$, $p < .05$). Anxiety and self-confidence, which were significantly associated during Treatment 1 did not approach significance during Treatment 2.

Table 14

Pearson Correlations between Anxiety, Task Performance 2, Self-Confidence, and the Covariate for Treatment 2

	Anxiety	Task 2	Self-Conf.	Cov.
Anxiety				
Task 2	-.02			
Self-Conf.	-.05	-.09		
Covariate	.20	.70*	-.08	

*$p < .05$

Table 15

Pearson Correlations between Anxiety, Desirability, Credibility, Task Performance 2, Self-Confidence, and the Covariate for Treatment 2 Only Using the Experimental Groups

	Anxiety	Des.	Cred.	Task 2	Self-Conf.	Cov.
Anxiety						
Des.	-.16					
Cred.	-.27	.71*				
Task 2	.01	.08	.23			
Self-Conf.	-.16	-.11	-.10	.04		
Covariate	.16	.16	.20	.73*	-.11	

*p < .05

A similar multiple regression was computed for Treatment 2 (R=.29 or slightly over eight percent of the total variance).

Finally subjects were requested to rate the type of feedback they received i.e., positively, negatively, neither or do not know. That is, each subject was requested to rate the feedback he received from the team of experienced interviewers. The results are reported in Table 16 .

Table 16

Perceived Feedback

	BF+ (n)	BF- (n)	EP+ (n)	EN- (n)	0 (n)
Positive	8	-	7	-	1
Negative	-	9	-	9	-
Neither	1	-	1	-	4
Do Not Know	-	-	1	-	4
Total	9	9	9	9	9

N=45

Based on the reported data, all 18 subjects who received negative feedback perceived the feedback as negative and 15 out of 18 subjects who received positive feedback perceived the feedback as positive. This final procedure insured that the positive or negative feedback was perceived by the subjects as the experimenter had intended the feedback to be perceived.

In summary, subjects' qualitative ratings on the task, Counselor Tacting Response Lead, were not affected by the descriptive, valenced feedback they received. Significant differences were obtained, however, between Session 2 and Session 3 which suggests that the increases in the ratings during Session 3 were significantly larger than Session 2. Additionally subjects who received behavioral negative feedback and emotional negative feedback rated the feedback as significantly less desirable and significantly less accurate than subjects who received behavioral positive feedback and emotional positive feedback.

Discussion

Less than one half of the original predictions were confirmed. Subjects who were given descriptive, negative, anonymous feedback did not have lower scores on measures of self-confidence and higher scores on situational (state) anxiety than subjects receiving positive feedback. Further, subjects who received behavioral positive and emotional positive feedback did not achieve higher scores on the qualitative ratings for task performance than subjects who received either behavioral negative or emotional negative feedback. Significance, however, was obtained for feedback desirability and credibility, as predicted by the experimenter.

This research helps to support predictions from such self-theorists as Rogers (1951) who advocates that positive feedback precedes other forms of feedback, because individuals are more receptive to self-enhancing information first. Then they would have less need to resist or discredit other types of feedback, e.g., negative, after their sense of security has been established. However, Miles (1958) and Stoller (1968b) speculated that it may be initially important to provide negative feedback, or information disconfirming one's self-concept in order to "unfreeze" the individual, so that he will be motivated to incorporate new information. This research does not support the "unfreezing" phenomenon; subjects in this study were unwilling to accept negative feedback, regardless of whether the feedback consisted of statements about their performance or statements describing the feelings of the deliverer about their performance.

Portnoy and Salzinger (1964) speculated that verbal responses having a negative evaluative meaning are aversive which would result

in a low operant level for negative-affect responses. They further reasoned that positive-affect statements would carry with them positive reinforcement and would increase the strength with each emission, resulting in a high operant level. Their findings suggest that both positive-affect and negative-affect statements condition equally well. This experimenter's research demonstrated a similar finding, i.e., individuals acquired the basic listening skill regardless of whether the feedback was positive, negative, or non-existent.

Festinger's theory of cognitive dissonance (Festinger, 1957) was also supported by this research. Festinger stated that when an individual is the recipient of a discrepant interpretation of self it arouses dissonance in the subject and motivates the subject to reduce the dissonance. Bergin's (1962) study demonstrated that an individual will change a self-rating based on information from a source of high credibility more than an individual receiving a similar communication from a low credibility source. More recently, Freeman (1973) offered subjects two modes of dissonance reduction; subjects could change their self-cognitions or they could derogate the source of the interpretation. Freeman found that subjects were more willing to accept positive feedback about self than negative feedback and further, negative feedback about self appeared to elicit derogatory feelings even when received from a high status individual (psychologist). Freeman's research is in direct contradiction to Bergin's study yet supports the findings of this experimenter. Negative, anonymous feedback was found to be less credible than positive feedback even when the feedback that was received came from a high status individual.

Finally, Jacobs et al (1973a; 1973b; 1974) and Jacobs (1974)

have sought answers to the contention that feedback is one of the most important processes which occurs in group interventions. Jacobs "credibility gap", which states that positive feedback is almost always rated by its recipients as more credible and desirable than negative feedback, was tested by this experimenter. This experimenter applied predictions of the "credibility gap" regarding the effects of feedback on the acquisition of a basic learning skill. Additionally, this experimenter studied the "credibility gap" using total anonymity, whereas Jacobs et al never attempted to conceal totally the source of the feedback. Total anonymity did not render negative feedback more desirable and surprisingly did not render the feedback more credible, as predicted. Also Jacobs (1974) predicted that feedback which identifies recipients' deficiencies arouses anxiety, a contention that was not supported by this experimenter's results.

In conclusion, this research helps to support predictions from: Roger's self-theory, which suggests that subjects are more receptive to positive-enhancement than feedback which threatens self-image; Festinger's dissonance theory, which suggests that individuals are predisposed to ward off information that would disconfirm a positive conception of self, and Jacobs "credibility gap" i.e., positive feedback is almost always rated by its recipients as more credible than negative feedback.

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